GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:2627
ANSWERED ON:08.08.2001
LEAKAGE FROM ATOMIC POWER PLANTS
RAMDAS ATHAWALE

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) the names of the atomic power stations in the country which are to be completed;

(b) the steps proposed to be taken to ensure that there is no leakage of radio-active substances from these stations;

(c) the details of the atomic power plants from which leakage of radio-activity substances had occurred in the last three years;

(d) whether any study has been conducted or proposed to be conducted to determine its effect on families residing near these plants;

(e) if so, the outcomes thereof; and

(f) the action taken or proposed to be taken by the Government in this regard?

Answer

THE MINISTER OF STATE OF THE MINISTRY OF SMALL SCALE INDUSTRIES, AGRO AND RURAL INDUSTRIES, MINISTER OF STATE IN THE DEPARTMENT OF PERSONNEL AND TRAINING, DEPARTMENT OF PENSIONS AND PENSIONERS WELFARE OF THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE (SHRIMATI VASUNDHARA RAJE)

(a) Proposals for nuclear power development in the Ninth Five Year Plan include commencement of 2x500 MWe plant at Tarapur (TAPP 3&4) and additional 2x220 MWe unit at Kaiga (Kaiga 3&4), besides commissioning of the Detailed Project Report(DPR) for the 2x1000 MWe Nuclear Power Station at Kudankulam in Tamil Nadu with Russian assistance and commencement of work on the Prototype Fast Breeder Reactor(PFBR) of 1x500 MWe towards the end of the 9th Plan. Further, as per the present plans, two projects viz. Kaiga-5&6 (2x220 MWe) and RAPP-5&6 (2x500 MWe) are planned to be commenced during 10th Plan period subject to availability of financial resources.

(b) & (c) Periodic inspection of equipment, prevention of leakages and careful control and monitoring of radioactive dis- charges are the preventive measures that continuously remain in force to ensure that radioactive discharges/ leakages do not exceed the limit laid down by Atomic Energy Regulatory Board (AERB).

Some amount of radioactivity is permitted to be dis- charged from every Nuclear Power Plant(NPP). The Atomic Energy Regulatory Board(AERB) has specified the limits for the discharge of radioactivity for each of the NPPs.

In the last three years, there has been one incident where this limit was exceeded. Subsequent to a leak in moderator heat exchanger of RAPS Unit-2 on May 5, 1998, heavy water containing tritium activity got released into Rana Pratap Sagar Lake. Though the limit on the tritium discharge was exceeded, the annual radiation dose to the public due to this release was estimated to be less than 25 microsievert compared to the annual limit 1000 microsievert prescribed by AERB.

There was another incident, in MAPS Unit-2 of heavy water leak due to failure of seal plug during coolant channel inspection on March 26, 1999. This incident led to release of some radioactivity through the stack, which was well within the specified limit. There was no release through the liquid route.

(d),(e) & (f) No, Sir. The atomic power plants are operated safely. The radioactive dose to the public residing near these plants due to the radioactive releases are well within the limits prescribed by AERB. In the light of this no study has been conducted or proposed to be conducted to determine the effect of leaked radioactivity on families residing near these plants.